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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,666	02/14/2002	Huy M. Nguyen	RB1-041US	1711

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EXAMINER

CUNNINGHAM, TERRY D

ART UNIT	PAPER NUMBER
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2816

DATE MAILED: 09/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/076,666

Applicant(s)

NGUYEN ET AL.

Examiner

Terry D. Cunningham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-73 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-73 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Title

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

It is not seen that the amendment to the Title overcomes the objection. It is suggested that the Title be changed to something such as --Distributed Compensated Voltage Driver With Feedback--.

Claim Rejections - 35 USC § 112

In claim 6, there is no support for the “feedback component”, in addition to the structure recited in claim 1. It is clear from the specification that the “feedback component” is part of the already recited “voltage driver” of claim 1. Without stating this, the claim is seen to be misdescriptive.

Claims 7-9, 25, 26, 28, 30 and 31 are rejected for similar reasons as claim 6.

In claim 33, there is no support for the language of lines 4-5. As seen from the specification, the “reference voltage driver” provides the operation recited in lines 4-5 and includes the “feedback receiver”.

Claims 34-42 are rejected for the reasons discussed above with claim 33.

Claims 43-49 are rejected for similar reason as claims 33-42.

Applicant’s remarks for the above rejections are not understood. The rejection states that the claims are indefinite (the basis being 35 U.S.C. § 112), the expressly states what is indefinite about such.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manning (USPN 6,288,954) in view of Kajigaya et al. (USPN 5,426,616).

With respect to claims 1-59, the reference to Manning discloses, in Figs. 1 and 4, a circuit comprising: “a plurality of memory cells (84)” and a “reference voltage driver” (V_{ref}). The reference to Manning discloses the “reference voltage driver” broadly and thus, does not disclose the specific detail recited therefor. Kajigaya et al. disclose, in Figs. 27 and 37, a specific “reference voltage driver” providing variable gain with high accuracy. This “reference voltage driver” is seen to include “a feedback receiver”, “a register (DEC1 and DEC2)” and a counter (CTRN and CTRB). Therefore, it would have been obvious for one skilled in the art to use the specific “reference voltage driver” of Kajigaya et al. for the broad “reference voltage driver” of Manning for the expected results of variable gain with high accuracy.

With respect to claims 53-62, clearly the above discussed combination to Manning in view of Kajigaya et al. will provide the recited method.

With respect to claims 63-73, the above combination discloses “a reference voltage driver (V_{ref} of Manning and all of Figs. 27 and 37 of Kajigaya et al.)”; “a plurality of receivers (19₀-18_n and 20₀-20_n of Manning)”, all connected and operating similarly as recited by Applicant.

Examiner has fully considered Applicant's remarks for the above rejection and has not found them to be persuasive.

The remarks merely cite a portion of each independent claim, then goes not to state that the above combination does not teach such. However, since the above rejection provides for all of the elements recited in the claims, it is seen that Applicant is merely contradicting the rejection without providing any specific reason for the contradiction.

By way of example, Examiner will discuss claim 1. Contrary to Applicants remarks, the reference to Manning teaches a "compensated voltage" that is distributed to "one or more components", comparators (19_0 - 18_n and 20_0 - 20_n). And clearly, VL is fed back to the non-inverting input of OA1, via the divider R10-R18, providing negative feedback operation (because Q3 is a PMOS). Due to the negative feedback operation, the gain of the circuit will necessarily increase "when the distributed reference voltage is less than nominal" and decrease "when the distributed reference voltage is greater than nominal".

Thus, contrary to Applicant's remarks, the above combination to Manning in view of Kajigaya et al. discloses all the recited claim elements. As a result, the rejections in view thereof are hereby maintained.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

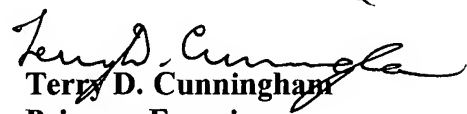
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terry Cunningham whose telephone number is 703-308-4872. The examiner can normally be reached on Monday-Thursday from 7:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on 703-308-4876. The fax phone numbers for Technology Center 2800 are 703-872-9318 for Before Final communications and 703-872-9319 for After Final communications. Please note, any faxed paper clearly stating **DRAFT** or **PROPOSED AMENDMENT** at the top will be forwarded directly to the Examiner. All others will be treated as a formal response and acted upon accordingly.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is 703-308-0956.

TC
September 22, 2003


Terry D. Cunningham
Primary Examiner
Art Unit 2816